

## Scientific publications by Thomas Leitner

Theoretical Biology and Biophysics  
Los Alamos National Laboratory

### Peer-reviewed papers

- Skar H, Borrego P, Wallstrom TC, Mild M, Marcelino J, Barroso H, Taveira N, Leitner T, Albert J. 2010. HIV-2 genetic evolution in patients with advanced disease is faster than in matched HIV-1 patients. *J Virol* : in press.
- Bulla I, Schultz A-K, Schreiber F, Zhang M, Leitner T, Korber B, Morgenstern B, Stanke M. 2010. HIV classification using coalescent theory. *Bioinformatics*: Apr 16 [Epub]
- Zhang M, Macke J, Foley B, Schultz A-K, Morgenstern B, Korber B, Leitner T. 2010. Old and new viral strains co-circulate in the dynamic HIV-1 epidemic. *Retrovirology* 7:25.
- Neher RA, Leitner T. 2009. Recombination rate and selection strength in HIV intra-patient evolution. *PLoS Comput Biol* 6: e1000660.
- Maljkovic Berry I, Athreya G, Kothari M, Daniels M, Korber B, Kuiken C, Leitner T. 2009. The evolutionary rate dynamically tracks changes in HIV-1 epidemics: application of a simple method for optimizing the evolutionary rate in phylogenetic trees with longitudinal data. *Epidemics*: in press.
- Schultz A-K, Zhang M, Bulla I, Leitner T, Korber B, Morgenstern B, Stanke M. 2009. jpHMM: Improving the reliability of recombination prediction in HIV-1. *Nucleic Acids Res* 37: W647-651.
- Paraskevis D, Pybus O, Magiorkinis G, Hatzakis A, Wensing AMJ, van de Vijver DA, Albert J, Angarano G, Asjo B, Balotta C, Boeri E, Camacho R, Chaix M-L, Costagliola D, De Luca A, de Mendoza C, Horban A, Korn K, Kucherer C, Leitner T, Loveday C, MacRae E, Maljkovic I, Meyer L, Nielsen C, Op de Coul ELM, Ormaasen V, Perrin L, Puchhammer-Stockl E, Roman F, Ruiz L, Salminen M, Schmit J-C, Schuurman R, Soriano V, Stanczak J, Stanojevic M, Van Laethem K, Violin M, Yerly S, Zazzi M, Boucher CA, Vandamme A-M, the SPREAD Programme. 2009. Tracing the HIV-1 subtype B mobility in Europe: a phylogenetic approach. *Retrovirology* 6:49.
- Pang J, Kluetsch C, Zou X-J, Zhang A-B, Lou L-Y, Angleby H, Ardalan A, Ekstrom C, Skollermo A, Lundeberg J, Matsumura A, Leitner T, Zhang Y-P, Savolainen P. 2009. mtDNA Data Indicates a Single Origin for Dogs South of Yangtze River, less than 16,300 Years Ago, from Numerous Wolves. *Mol Biol Evol*: in press.
- Tsibris AMN, Korber B, Arnaout R, Russ C, Lo C-C, Leitner T, Gaschen B, Theiler J, Paredes R, Su Z, Hughes MD, Gulick R, Greaves, Coakley E, Flexner C, Nusbaum C, Kuritzkes DR. 2009. Quantitative deep sequencing reveals dynamic HIV-1 escape and large population shifts during CCR5 antagonist therapy *in vivo*. *PLoS ONE* 4: e5683.
- Lee HY, Park S, Perelson AS, Leitner T. 2008. Dynamic correlation between intrahost HIV-1 quasispecies evolution and disease progression. *PLoS Comput Biol* 4: e1000240.
- Hraber P, Kuiken C, Waugh M, Geer S, Bruno WJ, Leitner T. 2008. Automatic classification of HCV and HIV-1 sequences with the branching index. *J Gen Virol* 89: 2098-2107.
- Skar H, Sylvan S, Hansson H-B, Gustavsson O, Boman H, Albert J, Leitner T. 2008. Multiple HIV-1 introductions into the Swedish intravenous drug user

- population in the years of 2001-2002. *Genetics, Infection and Evolution* 8: 545-552.
- Johansen K, Mannerqvist K, Allard A, Andersson Y, Burman LG, Dillner L, Hedlund KO, Jönsson K, Kumlin U, Leitner T, Lysen M, Thorhagen M, Tiveljung-Lindell A, Wahlström C, Zweyberg-Wigart B, Widell A. 2008. Norovirus strains belonging to the GII.4 genotype dominate as a cause of nosocomial outbreaks of viral gastroenteritis in Sweden 1997-2005 arrival of new variants is associated with large nation-wide epidemics. *J Clin Virol* 42: 129-134.
- Ripamonti C, Leitner T, Lauren A, Karlsson I, Pastore A, Cavarelli M, Antonsson L, Plebani A, Fenyö EM, Scarlatti G. 2007. Biological and genetic evolution of HIV type 1 in two siblings with different patterns of disease progression. *AIDS Res Hum Retroviruses* 23:1531-1540.
- Maljkovic Berry I, Ribeiro R, Kothari M, Athreya G, Daniels M, Lee HY, Bruno W, Leitner T. 2007. Unequal evolutionary rates in the HIV-1 pandemic: The evolutionary rate of HIV-1 slows down when the epidemic rate increases. *J Virol* 81: 10625-10635.
- Leitner T, Dazza M-C, Ekwalanga M, Apetrei C, Saragosti S. 2007. Sequence diversity among chimpanzee simian immunodeficiency viruses (SIVcpz) suggests that SIVcpzPts was derived from SIVcpzPtt through additional recombination events. *AIDS Res Hum Retrovirus* 23: 1114-1118.
- Madsen TV, Leitner T, Lohse N, Obel N, Ladefoged K, Gerstoft J, Petersen AB, Nielsen C, Joergensen LB. 2007. Introduction of HIV-1 into an isolated population: Molecular epidemiology study from Greenland. *AIDS Res Hum Retrovirus* 23: 675-681.
- Hraber PT, Fischer WM, Bruno WJ, Leitner T, Kuiken C. 2006. Comparative analysis of hepatitis C virus phylogenies from coding and non-coding regions: the 5' untranslated region (UTR) fails to classify subtypes. *Virology Journal* 3: 103-112.
- Clevestig P, Pramanik L, Leitner T, Ehrnst A. 2006. CCR5 use by human immunodeficiency virus type 1 is associated closely with the gp120 V3 loop N-linked glycosylation site. *J Gen Virol* 87: 607-612.
- Zhang M, Schultz A-K, Calef C, Leitner T, Korber B, Morgenstern B, Stanke M. 2006. jpHMM at GOBICS: a web server to detect genomic recombination in HIV. *NAR* 34: W463-W465.
- Schultz A-K, Zhang M, Leitner T, Kuiken C, Korber B, Morgenstern B, Stanke M. 2006. Jumping profile Hidden Markov Models for database searching and applications to recombination sites in HIV and HCV genomes. *BMC Bioinf* 7: 265-280.
- Zuniga R, Lucchetti A, Galvan P, Sanchez S, Sanchez C, Hernandez A, Sanchez H, Frahm N, Linde CH, Hewitt HS, Hildebrand W, Altfeld M, Allen TM, Walker BD, Korber TM, Leitner T, Brander C. 2006. Relative dominance of gag p24-specific cytotoxic T lymphocytes is associated with human immunodeficiency virus control. *J Virol* 80: 3122-3125.
- van de Vijver DAMC, Wensing AMJ, Angarano G, Asjo B, Balotta C, Boeri E, Camacho R, Chaix M-L, Costagliola D, Op de Coul E, de Luca A, Maljkovic I, de Mendoza C, Derdelinckx I, Grossman Z, Hamouda O, Hatzakis A, Hoepelman IM, Hemmer R, Horban A, Korn K, Kucherer C, Leitner T, Loveday C, MacRae E, Meyer L, Nielsen C, Ormaasen V, Perrin L, Paraskevis D, Puchhammer-Stockl E, Ruiz L, Salminen MO, Schmit JCC, Schneider F,

- Schuurman R, Soriano V, Stanczak G, Stanojevic M, Vandamme A-M, Van Laethem K, Violin M, Wilbe K, Yerly S, Zazzi M, Boucher CAB. 2006. The calculated genetic barrier for drug resistance mutations in six different non-B subtypes and two CRF's in a large European dataset is largely similar to subtype B. *J Acquir Immune Defic Syndr* 41: 352-360.
- Zhang M, Wilbe K, Wolfe ND, Gaschen B, Carr JK, Leitner T. 2005. HIV-1 CRF13\_cpx revisited: identification of a new sequence from Cameroon and signal for sub-subtype J2. *AIDS Res Hum Retroviruses* 21: 955-960.
- Clevestig P, Maljkovic I, Casper C, Carlenor E, Lindgren S, Naver L, Bohlin A-B, Fenyö EM, Leitner T, Ehrnst A. 2005. The X4 phenotype of HIV type 1 evolves from R5 in two children of mothers, carrying X4, and is not linked to transmission. *AIDS Res Hum Retroviruses* 21:371-378.
- Malmsten A, Shao X-W, Sjodahl S, Fredriksson E-L, Pettersson I, Leitner T, Kallander CFR, Sandström E, Gronowitz JS. 2005. Improved HIV-1 viral load determination based on reverse transcriptase activity recovered from human plasma. *J Med Virol*. Jul;76(3):291-6.
- Wensing AMJ, van de Vijver DAMC, Angarano G, Asjo B, Balotta C, Boeri E, Camacho R, Chaix M-L, Costagliola D, de Luca A, Derdelinckx I, Grossman Z, Hamouda O, Hatzakis A, Hemmer R, Hoepelman IM, Horban A, Korn K, Kucherer C, Leitner T, Loveday C, MacRae E, Maljkovic I, de Mendoza C, Meyer L, Nielsen C, Op de Coul E, Ormaasen V, Paraskevis D, Perrin L, Puchhammer-Stockl E, Ruiz L, Salminen MO, Schmit JCC, Schneider F, Schuurman R, Soriano V, Stanczak G, Stanojevic M, Vandamme AM, Van Laethem K, Violin M, Wilbe K, Yerly S, Zazzi M, Boucher CAB. 2005. Prevalence of drug-resistant HIV-1 variants in untreated individuals in Europe: implications for clinical management. *Journal of Infectious Diseases* 192:958-966.
- Aleman S, Leitner T, Liu MA, Wahren B. 2004. Minor nef gene alterations after human HIV-DNA immunisation. *AIDS* 18:817-819.
- Savolainen P, Leitner T, Wilton AN, Matisoo-Smith E, Lundeberg J. 2004. A detailed picture of the origin of the Australian dingo, obtained from the study of mitochondrial DNA. *Proceedings of the National Academy of Sciences USA* 101:12387-12390.
- Koivula T, Ekman M, Leitner T, Löfdahl S, Svensson SB, Källenius G. 2004. Genetic characterization of the Guinea Bissau family of *Mycobacterium tuberculosis* complex strains. *Microbes and Infection* 6:272-278.
- Balode D, Ferdats A, Dievberna I, Viksna L, Rozentale B, Kolupajeva T, Konicheva V, Leitner T. 2004. Rapid epidemic spread of HIV-1 subtype A1 among intravenous drug users in Latvia and slower spread of subtype B among other risk groups. *AIDS Res. Hum. Retrovirus*. 20:245-249.
- Tran Thi Thanh H, Maljkovic I, Swartling S, Phung Dac C, Chiodi F, Leitner T. 2004. HIV-1 CRF01\_AE in intravenous drug users in Hanoi, Vietnam. *AIDS Res. Hum. Retrovirus*. 20:341-345.
- Maljkovic I, Wilbe K, Sölder E, Alaeus A, Leitner T. 2003. Limited transmission of HIV-1 drug resistance in 100 Swedish drug-naïve patients infected with subtypes A, B, C, D, G, U and CRF01\_AE. *AIDS Res. Hum. Retrovirus*.

- 19:989-997.
- Malmsten A, Shao X-W, Aperia K, Sandström E, Källander CFR, Leitner T, Gronowitz JS. 2003. HIV-1 viral load determination based on reverse transcriptase activity recovered from human plasma. *J. Med. Virol.* 71:347-359.
- Eriksson LE, Falk KI, Bratt G, Leandersson A-C, Wahren B, Leitner T. 2003. HIV-1 DNA development during long-term supervised therapy interruption. *AIDS Res. Hum. Retrovirus.* 19:259-265.
- Eriksson LE, Leitner T, Wahren B, Leandersson A-C, Falk KI. 2003. A multiplex real-time PCR for quantification of HIV-1 DNA and the human albumin gene in CD4+ cells. *APMIS* 111:625-633.
- Karlsson I, Antonsson L, Shi Y, Karlsson A, Albert J, Leitner T, Olde B, Owman C, Fenyö EM. 2003. HIV biological variability unveiled: frequent isolations and chimeric receptors reveal unprecedented variation of co-receptor use. *AIDS* 17:2561-2569.
- Wilbe K, Salminen MO, Laukkanen T, McCutchan F, Ray SC, Albert J, Leitner T. 2003. Investigation of novel HIV-1 recombinant forms using the branching index. *Virology* 316:116-125.
- Savolainen P, Zhang Y-P, Luo J, Lundeberg J, Leitner T. 2002. Genetic evidence for an East Asian origin of domestic dogs. *Science* 298:1610-1613.
- Rollman E, Lund LH, Sjöstrand DE, Leitner T, Wahren B. 2002. A unique amino acid deletion in the chimpanzee Cyclin T1 does not affect Tat trans-activation of human immunodeficiency virus (HIV). *AIDS* 16:2335-2337.
- Wilbe K, Tscherning-Casper C, Albert J, Leitner T. 2002. Identification of two CRF11-cpx genomes and two preliminary representatives of a new circulating recombinant form (CRF13-cpx) of HIV type 1 in Cameroon. *AIDS Res. Hum. Retrovirus.* 18:849-856.
- Casper C, Navér L, Clevestig P, Belfrage E, Leitner T, Albert J, Lindgren S, Ottenblad C, Bohlin AB, Fenyö EM, Ehrnst A. 2002. Co-receptor change appears after the immune deficiency is established in children infected with different HIV-1 subtypes. *AIDS Res. Hum. Retrovirus.* 18:343-352.
- Casper CHE, Clevestig P, Carlenor E, Leitner T, Anzén B, Lidman K, Belfrage E, Albert J, Bohlin A-B, Navér L, Lindgren S, Fenyö EM, Ehrnst AC. 2002. Appearance of the X4 phenotype is linked in HIV-1 infected mother and child pairs despite the early presence of R5 virus in the child. *J Inf Disease* 186: 914-921.
- Ljungberg K, Hassan MS, Islam MN, Siddiqui MA, Aziz MM, Wahren B, Islam KB, Leitner T. 2002. Subtypes A, C, G and recombinant HIV-1 are circulating in Bangladesh. *AIDS Res. Hum. Retrovirus.* 18:667-670.
- Leitner T, Albert J. 2000. Reconstruction of HIV-1 transmission chains for forensic purposes. *AIDS Rev.* 2:241-251.
- Robertson DL, Anderson JP, Bradac JA, Carr JK, Foley B, Gao F, Hahn BH, Kuiken C, Learn GH, Leitner T, McCutchan F, Osmanov S, Peeters M, Pieniazek D, Salminen M, Wolinsky S, Korber B. 2000. HIV-1 nomenclature proposal. *Science* 288:55-57.
- O'Meara D, Wilbe K, Leitner T, Hejdeman B, Albert J, Lundeberg J. 2001. Monitoring resistance to HIV-1 protease inhibitors by pyrosequencing. *J Clin*

- Microbiol 39:464-473.
- Laukkanen T, Albert J, Liitsola K, Green SD, Carr J, Leitner T, McCutchan FE, Salminen KO. 1999. Virtually full-length sequences of HIV type 1 J reference strains. AIDS Res. Hum. Retrovirus. 15:293-297.
- Leitner T, Albert J. 1999. The molecular clock of HIV-1 unveiled through analysis of a known transmission history. Proceedings of the National Academy of Sciences USA 96:10752-10757.
- Nijhuis M, Boucher CAB, Schipper P, Leitner T, Schuurman R, Albert J. 1998. Stochastic processes strongly influence HIV-1 evolution during suboptimal protease-inhibitor therapy. Proceedings of the National Academy of Sciences USA 95:14441-14446.
- Alaeus A, Leitner T, Lidman K, Albert J. 1997. Most genetic subtypes of HIV-1 have entered Sweden. AIDS 11:199-202.
- Colognesi C, Halapi E, Jansson M, Hodara V, Steuer G, Tresholdi E, Leitner T, Scarlatti G. 1997. The role of virologic and immunologic factors in mother-to-child transmission of HIV-1. American J. Repr. Imm. 38:197-200.
- Halapi E, Leitner T, Jansson M, Scarlatti G, Orlandi P, Plebani A, Romiti L, Albert J, Wigzell H, Rossi P. 1997. Correlation between HIV sequence evolution, specific immune response and clinical outcome in vertically infected infants. AIDS 11:1709-1717.
- Di Stefano M, Gray F, Leitner T, Chiodi F. 1996. Analysis of env V3 sequences from HIV-1-infected brain indicates restrained virus expression throughout the disease. Journal of Medical Virology 49:41-48.
- Leitner T, Kumar S, Albert J. 1997. Tempo and mode of nucleotide substitutions in gag and env gene fragments in human immunodeficiency virus type 1 populations with a known transmission history. Journal of Virology 71:4761-4770 (see also correction 1998: 72:2565).
- Norrgren H, Marquina S, Leitner T, Aaby P, Melbye M, Poulsen AG, Larsen O, Dias F, Escanilla D, Biberfeldt G, Albert J, Naucler A. 1997. HIV-2 genetic variation and DNA load in asymptomatic carriers and AIDS cases in Guinea-Bissau. J. Acquir. Immune Defic. Syndr. 16:31-38.
- Pettersson B, Andersson AL, Leitner T, Olsvik O, Uhlen M, Storey C, Black CM. 1997. Evolutionary relationships among the members of the genus Chlamydia based on 16S rDNA analysis. Journal of Bacteriology 179:4195-4205.
- Savolainen P, Rosen B, Holmberg A, Leitner T, Uhlen M, Lundeberg J. 1997. Sequence analysis of domestic dog mitochondrial DNA for forensic use. Journal of Forensic Sciences 42:593-600.
- Leitner T, Escanilla D, Franzén C, Uhlén M, Albert J. 1996. Accurate reconstruction of a known HIV-1 transmission history by phylogenetic tree analysis. Proceedings of the National Academy of Sciences USA 93:10864-10869.
- Leitner T, Korovina G, Marquina S, Smolskaya T, Albert J. 1996. Molecular epidemiology and MT-2 cell tropism of Russian HIV-1 variants. AIDS Res. Hum. Retrovirus. 12:1595-1603.
- Marquina S, Leitner T, Rabinovich RD, Benetucci J, Libonatti O, Albert J. 1996. Co-existence of subtypes B, F and a B/F env recombinant of HIV-1 in Buenos Aires, Argentina. AIDS Res. Hum. Retrovirus. 12:1651-1654.

- Myers G, Lu H, Calef C, Leitner T. 1996. Heterogeneity of papilloma viruses. Seminars in Cancer Biology 7:349-358.
- Pettersson B, Leitner T, Ronaghi M, Bölske G, Uhlén M, Johansson KE. 1996. The phylogeny of the *Mycoplasma mycoides* cluster as determined by sequence analysis of the 16S rRNA genes from two rRNA operons. Journal of Bacteriology 178: 4131-4142.
- Scarlatti G, Leitner T, Hodara V, Jansson M, Karlsson A, Wahlberg J, Rossi P, Uhlén M, Fenyö EM, Albert J. 1996. Interplay of HIV-1 phenotype and neutralizing antibody response in pathogenesis of AIDS. Immunology Letters 51: 23-28.
- Di Stefano M, Sabri F, Leitner T, Svennerholm B, Hagberg L, Norkrans G, Chiodi F. 1995. Reverse transcriptase sequence of paired cerebrospinal fluid and blood HIV-1 isolates during AZT-treatment. J Clin Microbiol. 33:352-355.
- Leitner T, Alaeus A, Marquina S, Lilja E, Lidman K, Albert J. 1995. Yet another subtype of HIV type 1? AIDS Res. Hum. Retrovirus 11:995-997.
- Leitner T, Escanilla D, Marquina S, Wahlberg J, Broström C, Hansson HB, Uhlén M, Albert J. 1995. Biological and molecular characterization of subtype D, G and A/D recombinant HIV-1 transmissions in Sweden. Virology 209:136-146.
- Albert J, Wahlberg J, Leitner T, Escanilla D, Uhlén M. 1994. Analysis of a rape case by direct sequencing of the HIV-1 *pol* and *gag* genes. Journal of Virology 68:5918-5924.
- Rübsamen-Waigmann H, von Briesen H, Scheuermann EH, Albert J, Leitner T, Schoeppe W. 1994. HIV infection by a blood-clotting preparation in a surgical patient. Münchener Medicinisches Wochenschrift 136:41-45.
- Leitner T, Halapi E, Scarlatti G, Rossi P, Albert J, Fenyö EM, Uhlén M. 1993. Analysis of heterogeneous viral populations by direct DNA sequencing. BioTechniques 15:120-126.
- Scarlatti G, Leitner T, Halapi E, Wahlberg J, Jansson M, Wigzell H, Fenyö EM, Albert J, Uhlen M, Rossi P. 1993. Analysis of the HIV-1 envelope V3-loop sequences from ten mother-child pairs. Ann. N. Y. Acad. Sci. 693:277-280.
- Scarlatti G, Leitner T, Halapi E, Wahlberg J, Marchisio P, Clerici-Schoeller MA, Wigzell H, Fenyö EM, Albert J, Uhlén M, Rossi P. 1993. Comparison of variable region 3 sequences of human immunodeficiency virus type 1 from infected children with the RNA and DNA sequences of the virus populations of their mothers. Proceedings of the National Academy of Sciences USA 90:1721-1725.
- Scarlatti G, Leitner T, Hodara V, Halapi E, Rossi P, Albert J, Fenyö EM. 1993. Neutralizing antibodies and viral characteristics in mother-to-child transmission of HIV-1. AIDS 7:45-48.
- Hultquist G, Seo M, Leitner T, Leygraf C, Sato N. 1987. The dissolution behaviour of iron, chromium, molybdenum and copper form pure metals and from ferritic stainless steels. Corros. Sci. 27:937-946.

## Books, book chapters, reviews

Kuiken C, Leitner T, Foley B, Hahn B, Marx P, McCutchan F, Wolinsky S, Korber B. 2009.

- HIV sequence compendium 2009. Theoretical Biology and Biophysics, Los Alamos National Laboratory, Los Alamos, NM.
- Schultz A, Zhang M, Leitner T, Korber B, Morgenstern B, Stanke M. 2008. JpHMM: Erkennung von Rekombinationen bei HIV. BIOforum. 2, 44-46. (In German).
- Kuiken C, Leitner T, Foley B, Hahn B, Marx P, McCutchan F, Wolinsky S, Korber B. 2008. HIV sequence compendium 2008. Theoretical Biology and Biophysics, Los Alamos National Laboratory, Los Alamos, NM.
- Korber BT, Miller CC, Leitner T. 2007. HIV subtypes, antigenic diversity, and vaccine design. Pp 65-75. *in* Kahn P, Gust I and Koff W. AIDS Vaccine Development: Challenges and Opportunities. Caister Academic Press, UK.
- Leitner T, Foley B, Hahn B, Marx P, McCutchan F, Mellors J, Wolinsky S, Korber B. HIV sequence compendium 2006/2007. Theoretical Biology and Biophysics, Los Alamos National Laboratory.
- Leitner T, Foley B, Hahn B, Marx P, McCutchan F, Mellors J, Wolinsky S, Korber B. 2005. HIV Sequence Compendium 2005. Theoretical Biology and Biophysics, Los Alamos National Laboratory, Los Alamos, NM.
- Leitner T, Korber B, Daniels M, Calef C, Foley B. HIV-1 subtype and circulating recombinant form (CRF) reference sequences, 2005. Pp. XX *in* T. Leitner *et al.* HIV Sequence Compendium 2005. Theoretical Biology and Biophysics, Los Alamos National Laboratory, Los Alamos, NM.
- Leitner T, Foley B, Hahn B, Marx P, McCutchan F, Mellors J, Wolinsky S, Korber B. 2004. HIV Sequence Compendium 2003. Theoretical Biology and Biophysics, Los Alamos National Laboratory, Los Alamos, NM.
- Leitner T. 2002. The molecular epidemiology of human viruses. Kluwer Academic Publishers, Boston.
- Kuiken CL, Leitner T. 2001. HIV-1 subtyping. Pp. 27-53 *in* A. Rodrigues and G. Learn. Computational analysis of HIV molecular sequences. Kluwer Academic Publishers, Boston.
- Robertson DL, Anderson JP, Bradac JA, Carr JK, Funkhouser RK, Gao F, Hahn BH, Kuiken C, Learn GH, Leitner T, McCutchan F, Osmanov S, Peeters M, Pieniazek D, Salminen M, Wolinsky S, Korber B. 2000. HIV-1 nomenclature proposal: a reference guide to HIV-1 classification. *In* B. Korber *et al.* Human Retroviruses and AIDS 1999: a compilation and analysis of nucleic acid and amino acid sequences. Los Alamos National Laboratory, Los Alamos, NM.
- Carr J, Foley BT, Leitner T, Salminen M, Korber B, McCutchan F. 1999. Reference sequences representing the principal genetic diversity of HIV-1 in the pandemic. Pp. III19-III26 *in* B. Korber *et al.* Human retroviruses and AIDS 1998: a compilation and analysis of nucleic acid and amino acid sequences. Los Alamos National Laboratory, Los Alamos, NM.
- Leitner T, Fitch WM. 1999. The phylogenetics of known transmission histories. Pp. 315-345 *in* K. A. Crandall. Molecular Evolution of HIV. Johns Hopkins, Baltimore, MD.
- Korber B, Foley B, Leitner T, Mellors JW, McCutchan F, Hahn B, Myers G, Kuiken C. 1998. Human Retroviruses and AIDS 1997: a compilation and analysis of nucleic acid and amino acid sequences. Los Alamos National Laboratory, Los Alamos, NM.

- Leitner T. 1998. Phylogenetic methods and HIV evolution. Pp. 439-473 in N. Saksena. Human Immunodeficiency Virus: Biology, Immunology and Molecular Biology. Medical Systems, Sasson, Italy.
- Leitner T., Korber B, Robertson D, Gao F, Hahn B. 1998. Updated proposal of reference sequences of HIV-1 genetic subtypes. Pp. III19-III24 in B. Korber et al. Human Retroviruses and AIDS 1997: a compilation and analysis of nucleic acid and amino acid sequences. Los Alamos National Laboratory, Los Alamos, NM.
- Leitner T. 1997. Genetic subtypes of HIV-1. Pp. (III)28-(III)40 in G. Myers, B. Korber, B. Foley et al. Human retroviruses and AIDS 1996: a compilation and analysis of nucleic acid and amino acid sequences. Los Alamos National Laboratory, Los Alamos, NM.
- Leitner T. 1997. Genetiska subtyper av HIV-1. Pp. 327-331 (in Swedish) in L. Moberg. Perspektiv på HIV. Stiftelsen Noaks Ark-Röda Korset, Stockholm.
- Leitner T., Albert J. 1996. A new genetic subtype of HIV-1. Pp. (III)147-(III)150. in G. Myers, B. Korber, B. H. Hahn et al. Human retroviruses and AIDS: a compilation and analysis of nucleic acid and amino acid sequences. Los Alamos National Laboratory, Los Alamos, NM.

## Other publications

- Lemey P, Hillis D, Candelas FG, Milinkovitch M, Leitner T. 2006. Molecular evidence backs accused medics – Expert opinion. Nature 444: 658-659.
- WHO-UNAIDS Network for HIV Isolation and Characterization. 2002. WHO-UNAIDS guidelines for standard HIV isolation and characterization procedures. WHO, Geneva, Switzerland.
- Agosto M, Allan J, Benson C, Berger EA, Blumenthal R, Burton D, Clements J, Coffin J, Connor R, Cullen B, Desrosiers R, Dimitrov D, Doms R, Emerman M, Feinberg M, Fultz P, Gerard C, Gonsalves G, Haase A, Haigwood N, Hirsch V, Ho D, Hoxie JA, Hu SL, Hunter E, Johnson P, Kawata PA, Korber B, Kuiken C, Learn GH, Leitner T., Lewis G, Link D, Luban J, Luzuriaga K, Malim M, Marx P, McCune JM, Montefiori D, Moore J, Morrow C, Mosier D, Muesing M, Nixon D, Nunberg J, Overbaugh J, Parren P, Planelles V, Pope M, Posnett DN, Siliciano R, Steinman R, Stevenson M, Swanson R, Walker BD, Wolinsky S, Zingale D. 1998. AIDS vaccine development. Science 208:803-805.
- UNAIDS Virus Network. Report of the Technical Working Group. 1998. Characterisation of globally prevalent HIV strains in relation to HIV vaccine development. WHO, Geneva, Switzerland.